

Name _____ Energy Form _____ Block _____ Group Members _____

This project will include 2 summative grades which will be reflected by the rubric below. Additional formative assessments will be assessed through the process of research, contributions to the project, and ability to reflect on the energy transformation process.

Process:

- Students will be grouped and work together researching a selected energy source and the way that energy source is used and converted to an end product or usable energy within our society (example: how coal [that's the source] is transformed to electricity [that's the usable energy within our society])
- Students will use note organizer provided as a place to gather data from reading materials provided.
- After students have researched their energy source they will construct a poster explaining the energy transformations for their selected energy source and its efficiency and best use.
- This poster will be presented to the class.
- Students will be responsible for information and understanding of all 9 energy sources. This will be done by note taking during classmate presentations on other topics.

Products:

*Energy Sources Project - Research Note Catcher (completed individually).

*Poster on selected energy source (completed as group).

Poster includes:

- A thorough explanation of major energy transformations involved with their energy source
- An accurate annotated diagram of the process of energy transformation with direction of energy flow.
- An explanation for the best use of energy source and its efficiency.
- 3 pros (may be related to cost, efficiency, pollutants, availability, etc.).
- 3 cons(may be related to cost, efficiency, pollutants, availability, etc.).
- An explanation of the appropriate geographic location of this energy source.
- Real life examples of energy usage.
- Identification as renewable / nonrenewable.

*Energy Sources Project - Presentation Notes (completed individually)

Resources:

- ~Energy sources packets (class copies).
- ~Physical Science Textbook (blue book) pages 254 - 276.
- ~Graphics sheets.

Learning Targets:

SWBAT identify and explain energy transformation in the processes used to turn different energy sources into usable energy.

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SWBAT identify and explain energy efficiency and its benefits with different types of energy sources.

Energy Project Rubric	1	2	3	4
Energy Transformations	<p>___ Identifies some energy transformation.</p>	<p>___ Provides an explanation of some energy transformations involved with their energy source. ___ Provides diagram of the process of energy transformation. ___ Provides some labels or direction of energy transformation.</p>	<p>___ Provides a thorough explanation of major energy transformations involved with their energy source. ___ Provides accurate annotated diagram of the process of energy transformation. ___ Provides diagram with labels and direction of energy transformation.</p>	<p>___ Provides a thorough explanation of all energy transformations involved with their energy source. ___ Provides complete and accurate annotated diagram of the process of energy transformation. ___ Provides diagram with labels, direction of energy transformation and additional information. ___ Diagram is neat, colored and engaging.</p>
Efficiency and Best Use of Energy Source	<p>___ Provides an explanation of the energy source. ___ Provides either pros or cons.</p>	<p>___ Provides an explanation for the best use of their energy source and the efficiency that is somewhat accurate or complete. ___ Provides less than 3 Pros and 3 Cons. ___ Provides a geographic location of this energy source.</p>	<p>___ Provides an explanation for the best use of their energy source and the efficiency that is complete and accurate. ___ Provides 3 pros and 3 cons. ___ Provides an explanation of the appropriate geographic location of this energy source. ___ Presentation includes interesting facts and real life examples. ___ Correctly identifies source as renewable / nonrenewable.</p>	<p>___ Provides an explanation for the best use of their energy source and the efficiency that is complete, accurate, and thorough. ___ Provides 3 Pros and 3 Cons with extensive explanation. ___ Provides an explanation of the appropriate geographic location of this energy source. ___ Presentation relates to real life examples with statistics and facts. ___ Correctly identifies source as renewable / nonrenewable.</p>

Feedback: